I Claim:

1. A method for electronically identifying a coded part, said method comprising the steps of:

(a) locating a machine-readable area relief pattern formed with a surface of the part, the relief pattern comprising separate and distinct code elements extending along both x and y axes, and each having a profile dimension extending along a z-axis;

(b) measuring along the x, y, and z axes a region of interest containing the area relief pattern;

(c) extracting the area relief pattern from the measured region of interest; and

(d) decoding the area relief pattern to extract part information encoded therein.

2. A method according to claim 1, wherein the step of measuring the region of interest comprises employing a laser line scanner adapted for projecting a laser line onto the surface of the part containing the area relief pattern.

3. A method according to claim 2, wherein the step of measuring the region of interest further comprises moving the coded part relative to the laser line scanner.

4. A method according to claim 3, and comprising measuring the region of interest on-the-fly as the coded part is moved past the laser line scanner.

5. A method according to claim 4, and comprising moving the coded part past the laser line scanner at a minimum rate of 1 fps.

6. A method according to claim 5, and comprising arranging multiple laser line scanners at predetermined locations relative to the moving coded part.

7. A method according to claim 1, wherein the area relief pattern comprises a peened area code.

8. A method according to claim 1, wherein the coded part comprises a cast alloy wheel.

9. A method according to claim 8, wherein the area relief pattern is formed with a rim barrel of the wheel.

10. A method for electronically identifying a coded part, said method comprising the steps of:

(a) marking an exposed surface of the part with a machine-readable area relief pattern, the relief pattern comprising separate and distinct code elements extending along both x and y axes, and each having a profile dimension extending along a z-axis;

(b) locating the area relief pattern on the part;

(c) measuring along the x, y, and z axes a region of interest containing the area relief pattern;

(d) extracting the area relief pattern from the measured region of interest; and

(e) decoding the area relief pattern to extract part information encoded therein.

11. A method according to claim 10, wherein the step of measuring the region of interest comprises employing a laser line scanner adapted for projecting a laser line onto the surface of the part containing the area relief pattern.

12. A method according to claim 11, wherein the step of measuring the region of interest further comprises moving the coded part relative to the laser line scanner.

13. A method according to claim 12, and comprising measuring the region of interest on-the-fly as the coded part is moved past the laser line scanner.

14. A method according to claim 13, and comprising moving the coded part past the laser line scanner at a minimum rate of 1 fps.

15. A method according to claim 14, and comprising arranging multiple laser line scanners at predetermined locations relative to the moving coded part.

16. A method according to claim 10, wherein the area relief pattern comprises a peened area code.

17. A method according to claim 10, wherein the coded part comprises a cast alloy wheel.

18. A method according to claim 17, wherein the area relief pattern is formed with a rim barrel of the wheel.